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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,353	03/16/2001	David K. Sturley	873A 3024	9204
7590 02/18/2004				
MICHAEL D WIGGINS		EXAMINER		
950 HARMON		GARRETT, DAWN L		
BIRMINGHAM, MI 48009		ART UNIT PAPER NUMBER		
		1774		

DATE MAILED: 02/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/810,353	STURLEY, DAVID K.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Dawn Garrett	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-19 is/are allowed.
- 6) ☒ Claim(s) 1,2,9,11-15 and 20 is/are rejected.
- 7) ☒ Claim(s) 3-8 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 30, 2004 has been entered. Claims 1, 3, 4, 5, 7, 9, 10, 11, 12, and 16 were amended. New claim 20 was added. Claims 1-20 are pending.
2. The drawings remain objected to because they are hand-drawn.

***Response to Amendment***

3. The objections to claims 7 and 10 set forth in paper no. 7 (mailed July 8, 2003), paragraph 9, are withdrawn due to the amendment.
4. The rejection of claim 11 under 35 USC 112, second paragraph, set forth in paper no. 7, paragraph 11, is withdrawn due to the amendment.
5. The rejection of claims 1-5, 10-13, 16, and 17 under 35 USC 103(a) as being unpatentable over Murakami in view of Burnell-Jones (US 2001/0010367 A1) is withdrawn due to the added limitation requiring the first and second light transmissive layers are composed of glass.
6. The rejection of claims 6, 14, and 18 under 35 USC 103(a) as being unpatentable over Murakami in view of Burnell-Jones (US 2001/0010367 A1) in further view of Royce (US 5,376,303) is withdrawn.

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7. The rejection of claims 7, 15, and 19 under 35 USC 103(a) as being unpatentable over Murakami in view of Burnell-Jones (US 2001/0010367 A1) in further view of Hao (US 5,885,483) is withdrawn.

8. The rejection of claim 8 under 35 USC 103(a) as being unpatentable over Murakami in view of Burnell-Jones (US 2001/0010367 A1) in further view of Kaz (US 6,177,029) is withdrawn.

#### *Claim Objections*

9. Claims 3, 12, and 20 are objected to because of the following informalities: It is suggested that "0.01 to 0.15" be changed to "0.010 to 0.150" to correspond to the same number of significant digits described in the specification.

#### *Claim Rejections - 35 USC § 112*

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claims 12-15 and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is not seen where the added thickness limitation "greater than 0.0375 inches and less than 1.24 inches" is supported by the original specification. The examiner has found no discussion or examples disclosing these precise thickness endpoints. Accordingly, the thickness range is considered to be new matter.

*Claim Rejections - 35 USC § 102*

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 1 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Takada et al. (US 2001/0015623). Takada discloses a display device comprising glass substrates (101) and (102) (see drawing front page) and a phosphor layer (depicted as 111G in the front page drawing). The phosphor layer is comprised of phosphor dispersed in organic binder (see par. 96) per the “light transmissive resinous material containing a suspension of luminescent particles”. The panel is deemed to be “non-powered” when not connected to a power source. The silver electrodes (103) and (104) (see front page drawing) read upon the “partial of half silvered layer” of claim 9 (see also par. 53).

14. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Abe et al. (US 6,617,784). Abe et al. discloses an electroluminescent device comprising transparent conductive layer (2) and rear electrode (6), which may be a transparent conductive film such as ITO film (see front page drawing and col. 5, lines 30-31 and col. 3, lines 16-20). These layers read upon the first and second light transmissive material that includes glass. Component (4) shows luminescent particles that are held in place by insulating layer (5) and support layer (3) containing matrix resin (see col. 2, lines 52-65). The support layer comprises resins (see col. 7, lines 18-28) and the insulating layer comprises polymer with a high dielectric constant similar to

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the support layer polymers (see col. 7, lines 36-43). The luminescent particles embedded in the polymer comprising support and insulating layers read upon the instant luminescent material layer. The EL device is deemed to be "non-powered" when not connected to a power source or turned on.

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abe et al. (US 6,617,784). The rejection of claim 1 is relied upon as set forth above. Claim 2 requires a specific density of luminous material in the light transmissive resinous material. Although Abe et al. does not clearly set forth the density of luminescent particles within the polymer material of the support layer and the insulating layer, Abe et al. does recognize the content of the luminescent particles affects the amount of luminescence obtained. It would have been obvious to one of ordinary skill in the art to have obtained a density of luminescent particles based on the luminescence desired, because Abe et al. teaches the amount of luminescent particles affects the amount of luminescence obtained. The experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. *In re Aller*, 105 USPQ 233. A prima facie case of obviousness may be rebutted where the results of the optimizing variable, which is known to be result-

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effective, are unexpectedly good. *In re Boesch and Slaney*, 205 USPQ 215. To date, this burden has not been sustained.

***Allowable Subject Matter***

17. Claims 16-19 are allowed. Claims 3-8 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 11-15 and 20 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action. The closest prior art is considered to be Abe et al., which teaches a electroluminescent device comprising luminescent particles in binder material between transparent conductive glass. Abe et al. fails to teach or to render obvious the precise thickness of the luminescent layer according to claims 3, 11, and 12. Abe et al. fails to teach polyester or styrene resin as a resinous material for the support layer or insulative layer. Abe et al. fails to teach indicia in printed on the device per instant claim 5. Abe et al. fails to teach the particle luminescent material of claims 6, 7, 14, 15, 18, and 19. Takada et al. (US 2001/0015623) is considered to be the closest prior art to claim 10, but fails to teach a glass substrate completely mirrored. The prior art fails to teach a marker in cement, mortar, or brick according to claim 16 that includes two glass panels and a luminous layer as expressly claimed.

***Response to Arguments***

18. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

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*Conclusion*

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is 571-272-1523. The examiner can normally be reached Monday through Friday during normal business hours. Please allow the examiner twenty-four hours to return your call.

If reasonable attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached at 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DAWN GARRETT  
EXAMINER  
ART UNIT 1774

D.G.  
February 6, 2004